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EXAMINER

VILLECCO, JOHN M

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2612

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/788,669
Filing Date: February 21, 2001
Appellant(s): KAHN ET AL.

Allen M. Lowe
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 25, 2005 appealing from the Office action mailed February 25, 2005.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

In accordance with the applicants letter dated October 25, 2005 concerning the objection to claims 8, 10, 19, and 20, the examiner agrees with the applicants position. Thus, the objection of claims 8, 10, 19, and 20 from the final rejection has been withdrawn.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

A substantially correct copy of appealed claims 1-26 appears on page 23-27 of the Appendix to the appellant's brief. The minor errors are as follows:

- Applicant has omitted claims 22-26 as presented in the after-final amendment filed on April 25, 2005.

(8) Evidence Relied Upon

6,564,282	TORRES	05-2003
6,314,206	SATO	11-2001
6,549,307	MAKISHIMA et al.	04-2003
6,188,431	OIE	02-2001
JP 09-128276 A	IMAI et al.	05-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1, 7, 13, 14, and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Torres (U.S. Patent No. 6,564,282).

Regarding *claim 1*, Torres discloses a method of increasing storage capacity in a digital image capture device. More specifically, Torres discloses an imaging device (114) which serves

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as the information record capture mechanism, a memory (354) which serves as the device memory, and a CPU (344) which serves as the controller. In a specific embodiment of the invention, when a user wishes to capture an image when the memory is full, a storage recovery operation takes place. The operation evaluates the compression level of previously saved image files and if they are not sufficiently compressed, further compresses the image files in order to create more space in the memory. See col. 5, line 55 to col. 6, line 12. Additionally, Torres discloses that the user has the ability to prioritize the images so that certain images are compressed before other images. See column 6, lines 13-31. Furthermore, Torres discloses that the system looks at the file extension to determine the level of compression. Therefore, by establishing a priority level the system is also determining how far to compress the image.

As for *claim 7*, Torres discloses that a use can establish a priority level based on whether or not certain images are archived (col. 6, lines 18-20). Therefore, the priority level can indicate whether an image is stored elsewhere.

With regard to *claim 13*, Torres discloses that an image can be marked so as not be compressed (col. 6, lines 23-25).

Regarding *claim 14*, Torres discloses that the designation may be given to an image by the user (col. 6, lines 17-18). Inherently, the buttons and dials (404) would be used to designate specific images.

As for *claim 25*, Torres discloses that an image can be compressed or not compressed. Therefore, the image is compressed by a variable amount.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (U.S. Patent No. 6,564,282).

Regarding claim 15, as mentioned above in the discussion of claim 1, Torres discloses all of the limitations of the parent claim. Additionally, Torres discloses that it is well known in the art to group similar images into categories. See column 5, lines 4-25. However, Torres fails to explicitly state that whole groups of information records may be given a common priority rating. However, one of ordinary skill in the art at the time the invention was made would have found it obvious to assign a specific priority to a group of tagged images so that a user would not have to select every image and give it a priority if a user would like to save every image in a specific category. This would save considerable time and effort in the operation of the camera.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (U.S. Patent No. 6,564,282) in view of Imai et al. (Japanese Publ. No. 09-128276 A).

Regarding *claim 2*, as mentioned above in the discussion of claim 1, Torres discloses all of the limitations of the parent claim. However, Torres fails to explicitly state that one option for compression is deleting the image data. Imai, on the other hand, discloses that it is well known in the art to delete prioritized image data if there is not even free memory to store new image data. In the abstract, Imai discloses a recording medium (3), wherein, if the free memory is not enough to store new image data, an erased file selection part (23) selects a file to be erased according to a priority. By deleting the image data instead of compressing it, more memory can be freed up. Therefore, it would have been obvious to one of ordinary skill in the art at the time

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the invention was made to delete the image data instead of compressing it so that more free memory is created.

As for *claim 8*, as mentioned above in the discussion of claim 7, Torres discloses all of the limitations of the parent claim. Additionally, Torres discloses that images can be selected for compression if they are already archived (col. 6, lines 18-20). However, Torres fails to explicitly state that deletion of an image is only allowed if the image is stored elsewhere. Imai, on the other hand, discloses that it is well known in the art to delete prioritized image data if there is not even free memory to store new image data. In the abstract, Imai discloses a recording medium (3), wherein, if the free memory is not enough to store new image data, an erased file selection part (23) selects a file to be erased according to a priority. By deleting the image data instead of compressing it, more memory can be freed up. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to delete the image data instead of compressing it so that more free memory is created.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (U.S. Patent No. 6,564,282) in view of Sato (U.S. Patent No. 6,314,206).

With regard to *claim 3*, as mentioned above in the discussion of claim 3, Torres discloses all of the limitations of the parent claim. Additionally, Torres discloses that maintaining the quality of specific images may be important to a user. However, Torres fails to specifically disclose that the priority rating includes a maximum permissible compression level. Sato on the other hand discloses that a user can select a desired image quality and the system operates to set a maximum compression ratio. See column 5, line 57 to column 6, line 29. This allows a user to

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select a specific amount of compression in order to maintain a required image quality level.

Therefore, one of ordinary skill in the art would have found it obvious to also include an image quality level in the priority rankings of the images so that a specific level of compression is achieved in order to maintain an image quality level.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (U.S. Patent No. 6,564,282) in view of Sato (U.S. Patent No. 6,314,206) and further in view of Makishima et al. (U.S. Patent No. 6,549,307).

Regarding *claim 4*, as mentioned above in the discussion of claim 3, both Torres and Sato disclose all of the limitations of the parent claim. Additionally, Sato discloses that the quality level is set by the user. However, neither of the aforementioned reference specifically discloses that the compression levels are set for defined functional purposes. Makishima, on the other hand, discloses that based upon whether an image is to be printed or displayed a compression level is set. See column 2, lines 31-46. Therefore, the amount of compression can be set based upon the situation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to set the compression level to be suitable for defined functional purposes so that optimal image reproduction can take place.

As for *claim 5*, Makishima discloses that a user can select a printing mode in which an optimal compression is selected (col. 5, lines 8-60).

With regard to *claim 6*, Makishima discloses that a displaying method can be selected in which an optimal compression rate is selected. See column 2, lines 40-46.

Claims 9, 16, 17, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (U.S. Patent No. 6,564,282) in view of Oie (U.S. Patent No. 6,188,431).

Regarding *claim 9*, as mentioned above in the discussion of claim 1, Torres discloses all of the limitations of the parent claim. However, neither of the aforementioned references discloses an interface for downloading information records from a remote source. Oie, on the other hand, discloses that it is well known in the art to download images onto a camera from a remote source. More specifically, Oie discloses a camera (1a) which uses a communication terminal (47) to communicate with camera (1b). The camera (1a) sends selected images to camera (1b). By sending images from one location to a camera, the user of the camera is capable of viewing images taken by another user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to download information from a remote source so that one can view images taken remotely.

As for *claim 16*, Torres discloses a method of increasing storage capacity in a digital image capture device. More specifically, Torres discloses an imaging device (114) which serves as the information record capture mechanism, a memory (354) which serves as the device memory, and a CPU (344) which serves as the controller. In a specific embodiment of the invention, when a user wishes to capture an image when the memory is full, a storage recovery operation takes place. The operation evaluates the compression level of previously saved image files and if they are not sufficiently compressed, further compresses the image files in order to create more space in the memory. See col. 5, line 55 to col. 6, line 12. Additionally, Torres discloses that the user has the ability to prioritize the images so that certain images are compressed before other images. See column 6, lines 13-31. Furthermore, Torres discloses that

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the system looks at the file extension to determine the level of compression. Therefore, by establishing a priority level the system is also determining how far to compress the image.

Torres, however, fails to specifically disclose that the device includes a communications link for receiving information record captured at a remote information capture device. Oie, on the other hand, discloses that it is well known in the art to download images onto a camera from a remote source. More specifically, Oie discloses a camera (1a) which uses a communication terminal (47) to communicate with camera (1b). The camera (1a) sends selected images to camera (1b). By sending images from one location to a camera, the user of the camera is capable of viewing images taken by another user. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to download information from a remote source so that one can view images taken remotely.

As for *claim 17*, Torres discloses that the user is able to set a priority rating based upon whether or not the image quality is important. See column 6, lines 15-30. The predetermined criteria is the image quality. Furthermore, the CPU (344) would have to do some type of calculation in order to associate the tag with the image.

As for *claim 26*, Torres discloses that an image can be compressed or not compressed. Therefore, the image is compressed by a variable amount.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (U.S. Patent No. 6,564,282) in view of Oie (U.S. Patent No. 6,188,431) and further in view of Sato (U.S. Patent No. 6,314,206).

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With regard to *claim 11*, as mentioned above in the discussion of claim 9, Torres discloses all of the limitations of the parent claim. Additionally, Torres discloses that maintaining the quality of specific images may be important to a user. However, Torres fails to specifically disclose that the priority rating includes a maximum permissible compression level. Sato on the other hand discloses that a user can select a desired image quality and the system operates to set a maximum compression ratio. See column 5, line 57 to column 6, line 29. This allows a user to select a specific amount of compression in order to maintain a required image quality level. Therefore, one of ordinary skill in the art would have found it obvious to also include an image quality level in the priority rankings of the images so that a specific level of compression is achieved in order to maintain an image quality level.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (U.S. Patent No. 6,564,282) in view of Oie (U.S. Patent No. 6,188,431) and further in view of Sato (U.S. Patent No. 6,314,206) and Makishima et al. (U.S. Patent No. 6,549,307).

Regarding claim 12, as mentioned above in the discussion of claim 11, Torres, Oie, and Sato disclose all of the limitations of the parent claim. Additionally, Sato discloses that the quality level is set by the user. However, neither of the aforementioned reference specifically discloses that the compression levels are set for defined functional purposes. Makishima, on the other hand, discloses that based upon whether an image is to be printed or displayed a compression level is set. See column 2, lines 31-46. Therefore, the amount of compression can be set based upon the situation. Therefore, it would have been obvious to one of ordinary skill in

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the art at the time the invention was made to set the compression level to be suitable for defined functional purposes so that optimal image reproduction can take place.

(10) Response to Argument

A. Torres does not anticipate claims 1, 17, 13, 14 and/or 25 because, inter alia, Torres does not disclose how far to compress a particular information record on the basis of the priority rating of the particular information record, as required by claim 1, upon which claims 7, 13, 14 and 25 depend.

Regarding claim 1, applicant argues that Torres fails to specifically disclose how far to compress a particular information record on the basis of the priority rating. As shown in Figure 6 and column 5, lines 55-61, Torres discloses that the storage recovery procedure operates to determine if an image file has been compressed to the predetermined level. If the image has not been compressed to the predetermined level, the file is compressed to the predetermined level. Thus, a determination is made as to how far to compress the image file if it has not already been compressed to the predetermined level. In this particular instance when the image in Torres is compressed to the predetermined level, the examiner is interpreting the predetermined level to be “how far” the image is compressed. In other words, when priority given to a particular record in Torres is detected, that file is compressed to the predetermined level – and that predetermined level is interpreted by the examiner to be “how far” the information record is compressed. The phrase “how far” is an extremely broad phrase within the context of the claim and is interpreted to be compressing the image to the predetermined level. In response the applicant’s insistence that the inherency statement used in the Advisory Action is improper, the examiner points out that the inherency statement was merely used to explain that it is inherent that the predetermined level of Torres can be interpreted as “how far” to compress an image.

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As for claim 25, applicant argues that Torres fails to disclose that the controller compresses the particular information record by a variable amount on the basis of the priority rating. As discussed previously in the final rejection, Torres discloses the ability to either compress the image further or not compress the image further from the JPEG format. In the Advisory Action, the examiner clarifies his stance that since the image is first compressed using the JPEG standard and then recompressed based on the priority rating. Therefore, since the image is further compressed based on the priority rating from the JPEG compression standard, this results in compressing the information record by a variable amount on the basis of the priority rating.

B. Torres does not make obvious the requirement of claim 15, to give a class of information records a common priority rating.

Regarding claim 15, applicant argues that one of ordinary skill in the art would not have been motivated to modify Torres so that groups of images are given a common priority rating. However, the examiner maintains his position that one of ordinary skill in the art would have found it obvious, based on the teachings of Torres, to give an entire class of image a priority rating so that the whole group is either compressed or not compressed. Since Torres teaches the ability to group specific image into separate categories (col. 5, lines 10-25), one of ordinary skill in the art would have been motivated to give that category of images an associated priority rating as also disclosed by Torres (col. 6, lines 1-31).

Furthermore, taken in a more broad sense, Torres can also be read such that images that are already sent or archived are given a common priority rating. See column 6, lines 18-25.

C. Torres and Imai et al do not make obvious the requirements of claim 8 for one, but not the only, option available for handling an image record of Torres to be deletion of the image record only if the image record is stored elsewhere.

Firstly, applicant points out that since claims 2 and 8 do not require the deletion process to be part of the compression routine, the reliance on Imai is not necessary. The examiner admits that he may have read too much into the specification and not given the claim its broadest reasonable meaning. Particularly, the examiner assumed claims 2 and 8 were referring to page 29 of the specification, wherein automatically freeing memory includes using priority information to determine which files to compress or delete. That being said, applicant admits on page 13, lines 19-22 of the Appeal Brief that digital cameras are frequently manually operated so an image file is deleted and that memory space is thus preserved. Thus, according to the applicant claims 2 and 8 would not include patentable material. On the other hand, even though the examiner has read too much of the specification into claims 2 and 8, this does not invalidate the rejection from the previous office action since the specification makes reference to automatically deleting or compressing the image files according to a priority rating.

Regarding claims 2 and 8, applicant argues that since Imai teaches deletion of files in a computer system in order to conserve memory, this constitutes a different field of endeavour, or a non-analogous art. The examiner respectfully disagrees with this characterization. Since both references deal with free up memory space by manipulating the files based on a priority rating, they appear to be concerned with the same problem. The fact that Imai is not implemented in a camera is irrelevant. The problem solved by Imai is the same as the problem that Torres is

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concerned with and one of ordinary skill in the art would have looked to the teaching of Imai in order to solve the problem of free up memory space in a digital camera.

D. Torres and Saito (sic) do not make obvious the requirement of claim 3 for a priority rating to include a maximum permissible compression level for each information record.

Regarding claim 3, applicant contends that the combination of Torres and Sato is inappropriate and fails to meet the claim language. Again, the examiner respectfully disagrees with the applicant's characterization of the combination. Contrary to the applicants contention that Torres does not disclose that maintaining the quality of certain images may be important to a user, in col. 6, line 25, Torres specifically states that "certain files could also be tagged as unavailable for further compression, such as when it is desired to maintain the quality of the image" (emphasis added). Therefore, Torres discloses setting priority ratings based on the desired quality of retained image. Furthermore, Sato discloses that based on a desired image quality a user may set different maximum compression levels for images. Thus, when taken in combination, one of ordinary skill in the art would have found it obvious to allow a user to select different maximum compression levels for each image so that a desired image quality may be maintained.

E. The rejection of claims 4-6, all of which depend either directly or indirectly on claim 3, as being obvious as a result of Torres, Sato and Makishima et al. is wrong.

Regarding claims 4-6, applicant provides no arguments against the combination, other than what has already be discussed previously.

F. Torres and Oie do not render the subject matter of claims 9, 16, 17 and 26 obvious.

1. Claim 9, that depends on claim 1, distinguishes over Torres and Oie by requiring the portable information record capture device of claim 1 to have an interface for downloading information records from a remote source of such records.

Regarding claim 9, applicant argues that Oie has nothing to do with selecting how far information records are to be compressed on the basis of a priority rating of a particular information record. The examiner agrees with this assertion. Oie was used merely to show that it is well known in the art for a camera to receive images from a remote source to be stored in a memory. Furthermore, the examiner maintains the combination is proper since one of ordinary skill in the art would have found it obvious to look to Oie to make a combination with Torres for a camera capable of receiving images from a remote source.

2. Independent claim 16, and claims 17 and 26 that depend on it, are improperly rejected as being obvious as a result of Torres and Oie

Regarding claim 16, applicant argues that Torres does not have a controller for selecting how far a record is to be compressed on the basis of priority ratings of the records. This argument has already addressed. Please see the discussion of claim 1 on the preceding pages.

As for claim 17, applicant argues that Torres has no disclosure of priority ratings being calculated by a controller or by the central processing unit (344). The examiner disagrees with this assertion. Clearly, the central processing unit would have to do some type of calculation in order to associate the priority tags with the image. As the applicant is correct in assuming an

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implied inherency, an inherent feature of CPU's is the ability to process (i.e. calculate) information.

G. Claim 11, that depends on claim 9, is patentable over the combination of Torres, Oie and Sato because claim 11 requires the priority rating to include maximum permissible compression levels for each information record.

Regarding claim 11, arguments provided by the applicant are similar in nature to the arguments made with regard to claim 3. Please see the discussion of claim 3 on the preceding pages.

H. Claim 12, dependent on claim 11, is not rendered obvious by Torres, Oie, Sato and Makishima et al.

Regarding claim 12, applicant asserts that the arguments are the same as the argument made for claim 11. Please see the discussion of claim 3 above.

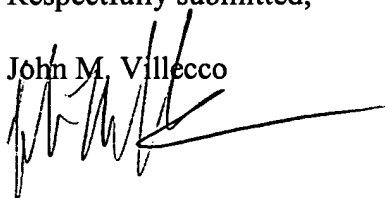
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

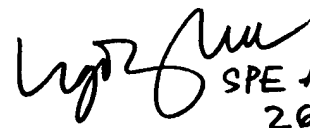

Respectfully submitted,

John M. Villecco



Conferees: Ngoc Yen Vu

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